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# Worldwide Report

EPIDEMIOLOGY

No. 242



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13 August 1981

## WORLDWIDE REPORT

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No. 242

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BRIEFS

MEASURES AGAINST RIVER BLINDNESS--Measures against river blindness in West Africa need to be extended to avoid reinfestation by the carrier of the disease, which has been successfully driven back in some areas, Niger's Health Minister, Mr Amadou Seyni Maiga said in Niamey. He was opening a meeting of national committees allied in a campaign against onchocerciasis, a fly-borne affliction propagated by minute worms commonly known as river-blindness. In the Volta River Basin more than one million people are estimated to be infected, with some 100,000 blind as a result, and many more suffering from serious eye problems. M. Maiga reported that in 80 per cent of the initial area earmarked for eradication of the vector, results had met the standards set to enable the fertile valleys abandoned by cultivators to be resettled and worked again. Thus in Upper Volta there was hardly a village where river blindness remained endemic, and in Niger the cycle of transmission of the disease had been broken and it was on the retreat. But the programme had to be extended into Benin and Togo and in the Senegal River Basin to avoid reinvasion, which had happened before 1975, M. Maiga warned. Countries, involved are Benin, Ghana, Ivory Coast, Mali, Niger, Togo, Upper Volta. [Text] [London WEST AFRICA in English No 3335, 29 Jun 81 p 1506]

CSO: 5400/5246



CUBA

#### BRIEFS

DENGUE FEVER REPORTED--According to a report released by the World Health Organization, an acute, infectious dengue fever is now prevailing in Cuba, announced the National Health Administration yesterday. The WHO said more than 80,000 cases had been found the end of June, mostly in the province of Havana. Twenty six children and five adults were reported dead. Same cases were also found in Dominica, according to the report. The NHA said the WHO has urged neighboring countries to step up control of mosquitoes. The NHA warned those who planned to go to the above areas in the near future to take precautions of this disease. [Text] [Taipei CHINA POST in English 4 Jul 81 p 12]

ANTI-MOSQUITO INSPECTIONS--As part of the national campaign against the aedes aegypti mosquito that transmits dengue, it has been reported that a process of self-inspection at all work centers will take place throughout the country until 31 July. The trade union sections will be in charge of the task. The aim is to discover any possible breeding places that still remains, check on the progress of fumigation and sanitation work, clean up storage areas and see that water deposits meet requirements. [FL211627 Havana Domestic Service in Spanish 1000 GMT 21 Jul 81]

CSO: 5400/2166



NEW PENICILLIN-RESISTANT FORM OF GONORRHEA ARRIVES

Copenhagen BERLINGSKE TIDENDE in Danish 18 Jul 81 p 5

[Article by Jens J. Kjaersgaard: "Supergonorrhea Spreads to Denmark"]

[Text] "During the first half of 1981, we have found more cases of the new, tough form of gonorrhea than we did in all of 1980," Superintendent Inga Lind of the Statens Seruminstitut, has told the BERLINGSKE TIDENDE.

"We expect the number of cases to double before the end of the year," Lind said. "There were 59 cases in all last year. Up until 1 July of this year we had discovered 62 of them. Most of them are imported from the Far East and western Africa."

"The new form of gonorrhea is insensitive to penicillin. The bacteria secrete an enzyme which breaks down that ordinarily-effective drug. It is for that reason that the doctors speak of the tough gonorrhea. But the disease can actually be treated effectively with other, and more expensive, types of antibiotics which are administered by injection, and that, in itself, provides assurance that the treatment will be carried out according to instructions," Superintendent Lind says.

Ordinarily, gonorrhea patients are sent home with a bottle of tablets, and there is no guarantee that they will take them, or share them with people of their acquaintance.

"We must prepare for the day--and it is certainly not far away--when the tough gonorrhea cannot be kept out any longer and one will run the danger of being infected in Denmark or Greenland," Dr. Gunnar Aagaard Olsen writes in an informational periodical published by the Committee for Health Information, under the title, "More On Venereal Disease 16."

"In the Far East, they can only treat something over half of all gonorrhea cases with penicillin, and the situation there can scarcely be improved appreciably. In the Los Angeles area of the United States, on the other hand, they have gotten good results for a period of a few months by treating all gonorrhea cases as if they were cases of tough gonorrhea. It was a bit difficult, but it paid off. That may well be the solution we are in need of in Denmark," Dr. Olsen said. The usual penicillin treatment which is given at present is 150 times as powerful as the one

which could knock out a gonorrhea infection 40 years ago. The gonococci are becoming insensitive to that drug to an increasing extent.

In 1980, there was again a marked increase in the number of cases of gonorrhea. The venereal disease hit 10,796 Danes, as compared with 9,618 in the previous year.

Assistant Professor Mogens Kilian, a doctor of odontology at the Aarhus dental college, is working on a research project which, among other things, is concerned with the possibility of giving preventive vaccinations against gonorrhea. In a few years, we will perhaps have injections which are specifically intended to interfere with the gonococci's ability to destroy our mucous membranes' system of defense!

9266

CS0: 5400/2161

GHANA

BRIEFS

'STRANGE' BLINDNESS-CAUSING DISEASE--A strange disease, which is making people blind, is said to have broken out at Bomaa in Brong-Ahafo. An urgent appeal has therefore been made to the minister of health as matter of urgency to send a medical team to the area to investigate the causes of the disease. Speaking to newsmen at parliament house, the MP for Tano, Mr Badu, said the victims, especially the old (?ones), lost their sight almost instantly. He expressed fears that any delay on the part of the minister would be disastrous. [Text] [AB250755 Accra Domestic Service in English 0600 GMT 25 Jul 81]

CSO: 5400/5231

## BRIEFS

POLIO DETECTED, VACCINATIONS GIVEN--Some isolated cases of infantile paralysis have been detected by the health services in the regions of Bimbo, Gabu and Bafata, according to information provided by Dr Venancio Furtado, director general of public health of the Ministry of Health and Social Affairs. The first cases were registered at the end of May at a health center in Cumura. Preventive medicine specialists and an epidemiologist traveled there. They confirmed these cases and adopted preventive measures; the four children involved were hospitalized and treated. "The polio virus must be active," Dr Furtado noted, because a number of additional cases were also detected in the eastern part of the country. "However, the situation is not alarming, because we were able to act at the right time, despite all the limitations," the public health director stated. When the first cases were detected, hospitals had only a reduced reserve of 500 polio vaccine doses. Six thousand more doses were immediately ordered from Dakar and distributed in the three regions affected. Meanwhile, 140,000 doses had been ordered through the UNICEF representative in Senegal, to cover the needs of the annual mass vaccination campaign. This order had not been filled as yet, and was transmitted urgently once again. Public health services are expanding preventive measures throughout the country, hoped that international organisms would promptly respond to an urgent appeal. The vaccination campaign is intended for children up to 3 years of age, given the fact that older children are generally protected through their own immunity, according to studies made since 1977. [Text] [Bissau NO PINTCHA in Portuguese 20 Jun 81 p 3]

CSO: 5400/5240

BRIEFS

CHOLERA DEATHS IN WEST JAVA--Jakarta, Indonesia, July 6 (AP)--Twelve persons have died and 312 others have been affected by cholera in the West Java district of Cilegon, about 100 kilometers. West of here, a health official said Monday. He said the disease has been spreading in the district for about a week. People in the surrounding areas have been warned to clean their environment and avoid drinking unboiled water, the spokesman said. [Text] [Taipei CHINA POST in English 7 Jul 81 p 2]

CSO: 5400/4949

## BRIEFS

WEST BANK CHOLERA CASE--Another case of cholera has been diagnosed in Bayt Jalah: a 2-year-old girl, a relative of the patient diagnosed the day before yesterday. This has been reported by the Ministry of Health. The girl has been hospitalized in Bayt Jalah. The health authorities are considering a closure of the Jordan bridges. [Text] [TA200642 Jerusalem Domestic Service in Hebrew 0600 GMT 20 Jul 81]

FIFTH CHOLERA CASE--Another case of cholera has been reported on the West Bank. The 50-year-old man has been hospitalized in a Bayt Jalah hospital. He returned a few days ago from Jordan, where several hundred cases of the disease have been reported. The spokesman from the Health Ministry says the latest case is the fifth since the outbreak began. [Text] [TA181914 Jerusalem Domestic Service in English 1800 GMT 18 Jul 81]

CHOLERA CASE IN WEST BANK--Another cholera case has been discovered in Judaea and Samaria, the seventh since the epidemic began in Jordan. The patient is a woman aged about 45 from the Tulkarm area and she has been hospitalized in Tulkarm. Her condition is described as stable. Our correspondent reports that visitors from Jordan visited her home a few days ago and it is suspected that they brought the illness. [Text] [TA280801 Jerusalem Domestic Service in Hebrew 0500 GMT 28 Jul 81]

CSO: 5400/4750

## BRIEFS

CHOLERA EPIDEMIC--Amman, July 11--A further 94 cases of cholera have been reported in Jordan during the past 24 hours, bringing to 81 the number of cases since the epidemic began just over one week ago, officials said here today, reports AFP. A health ministry official here said compulsory vaccination was not being introduced because it was effective only 20 percent of cases, and those vaccinated might take unnecessary risks. [Text] [Kathmandu THE RISING NEPAL in English 12 Jul 81 p 7]

CHOLERA SPREADS IN AMMAN--Amman, Jordan (AP)--A week-old outbreak of cholera escalated toward an epidemic Sunday with the discovery of 72 new cases of the disease, some of them in the capital of Amman. The Health Ministry said in a statement with the new cases to the total number of reported cholera cases has passed the 300 mark, including the four persons who died and 104 who were treated and released by hospitals. The Jordanian cabinet held an emergency meeting to review precautionary measures taken to prevent the spread of the disease. [Text] [Taipei CHINA POST in English 14 Jul 81 p 5]

CSO: 5400/4949



## POLIO VICTIMS IN COUNTRY SAID TO NUMBER 50,000

Blantyre DAILY TIMES in English 10 Jul 81 p 5

[Text]

**ABOUT 50,000 people are affected by polio in Malawi, and it should be the aim of all humanitarian organisations to help eradicate the crippling disease, the President of the Spanish Red Cross Society, Mr. Enrique De La Mata said yesterday.**

In an interview with newsmen before departure, Mr. De La Mata who is also Vice President of the International Red Cross Society assured the Malawi Red Cross Society of continued support in its endeavours to combat polio.

He said that during his visit "we considered some common questions regarding our bilateral co-operation" and the international movement in general.

The Red Cross official added that polio is a very dreadful disease which can retard development in many ways saying, "in Malawi polio is a big problem with over 50,000 people affected."

Commenting on the agreement signed last April, he said some materials for polio victims have already been received by MAP and the International Red Cross society had promised continued commitment in this programme of support.

"A combined effort by the Health Ministry and other humanitarian organisations like the Red Cross and MAP should help in putting an end to this (polio) dreadful disease," he added.

The Spanish Red Cross President was accompanied by Mr. Manuel Fiol, Director of International Affairs of the Spanish Red Cross.

During their three day visit the delegation also attended the Independence Anniversary Celebrations at the Kamuzu Stadium on July 6. — MANA

## PROJECTS

Mr. De La Mata said he came to Malawi because it is one of the most important countries in Africa for investment and projects because "it has peace and stability" which were essential for any successful venture.

While in the country, the two-man delegation also studied the possibilities of establishing a Red Cross association between Malawi and Spain.

The Spanish Red Cross society has affiliations with many African countries and in April, the Malawi Red Cross Society signed an agreement with the Spanish society to provide the Malawi Against Polio (MAP) movement with physiotherapeutic aid.

## SHARE PROBLEMS

He said that as Vice President of the International Red Cross Society, such visits were important because "they enable me to receive and share problems for reporting to the international body."

## BRIEFS

DECREASE IN MEASLES--Mana, Karonga--About 50 medical personnel drawn from all over Karonga District attended a two-day Mother and Child Health Seminar (MCH) at Baka agriculture training centre. On the functions of MCH, the [District] Medical Officer said that he was pleased to report that measles cases in the district had dropped which meant that the people realised the need for having their children immunised. [Excerpts] [Blantyre MALAWI NEWS in English 3 May 81 p 6]

SPANISH AID FOR POLIO--Blantyre, Monday--The Vice President of the Spanish Red Cross, Baron Carlos de Montoliu, informed members of the MAP Executive Committee during his recent visit to Malawi that his organisation had agreed to extend 7,000 dollars in aid to Malawi Against Polio (MAP), through the Malawi Red Cross Society. He said this when addressing representatives of MAP at a meeting held recently at the Queen Elizabeth Central Hospital, Blantyre. He stated that the aid would be in the form of wheelchairs, walking aids, medical supplies and materials for use in the local manufacture of appliances, which would help in bringing relief to the disabled. He added that it was gratifying to see a country like Malawi taking the initiative in organising relief for the handicapped persons within its community. [Excerpt] [Blantyre DAILY TIMES in English 21 Apr 81 p 3]

VACCINATORS COMPLETE COURSE--Salima, Thursday--Twenty-six vaccinators drawn from Nkhotakota and Salima have completed a week long polio vaccinators' course and will soon start a two-month vaccination exercise on Monday, July 13. The course held at Chitala Farm Institute in Chief Khombedza's area was organised by the Ministry of Health and conducted by its senior officials. The participants, 13 from Nkhotakota and another 13 from Salima, were also taught what polio is, its cause and effects. A district health inspector here has meanwhile appealed to people to have their children vaccinated against the disease as soon as the team arrives in their areas. The campaign, which is for babies of up to two years of age, will start at Ngozi in Salima South and end with Khombedza in Salima North.--MANA [Text] [Blantyre DAILY TIMES in English 10 Jul 81 p 5]

CSO: 5400/5242

## MOZAMBIQUE

### BRIEFS

MEASLES EPIDEMIC--Two hundred and sixty people have died in the measles epidemic in Beira town over the past 6 months. An antimeasles vaccination campaign will be launched from the Sofala provincial capital next Sunday in a move to fight the epidemic. All children between 6 months and 5 years will be vaccinated at centers already established in all wards of Beira. The Health director in Beira, who reported this, added that the incidents of death caused by measles is very high. She said that from January to June this year there had been over 150 deaths and over 100 people hospitalized. She also said that the vaccination campaign against measles has not been effective because it has only been applied to children between 9 months and 13 years. [Text] [EA250252 Maputo Domestic Service in Portuguese 1030 GMT 24 Jul 81 EA]

CSO: 5400/5231

DOCTOR ADVISES DENGUE QUARANTINE

PA311520 Managua Radio Corporacion in Spanish 1200 GMT 30 Jul 81

[News conference held by "well-known Managua doctor" (Ronald Sabonge); date and place not given--recorded]

[Excerpts] [Question] What danger is there [words indistinct] the arrival of dengue?

[Answer] I believe that in order to prevent the disease, all persons arriving from Cuba, regardless of who they may be, should be isolated for several days. Any Cuban could arrive here, even Fidel Castro, who had been bitten by a mosquito. Since Cuba has the mosquito and the disease, the mosquito can give Castro the disease. The mosquito bites him before he leaves for Nicaragua and the disease has an incubation period. During this period he does not have any symptoms, and he may come here, where one of our mosquitos bit him--a healthy mosquito, let us say, that does not carry the virus. The mosquito takes the virus from Castro's blood and it can bite anyone in Nicaragua. Therefore, apart from any other measures, persons arriving from Cuba should be placed in quarantine for several days.

[Question] Is there any vaccination against dengue?

[Answer] There are vaccines, so far as we know--some vaccines. One of these has been produced in the United States. It is effective, but it hasn't been used in any affected country.

CSO: 5400/2101

GOVERNMENT ALLOCATES MONEY FOR MALARIA, SICKLE CELL CONTROL

Kaduna NEW NIGERIAN in English 11 Jul 81 p 15

[Text]

THE Minister of Health, Dr. Daniel Ugwu, said in Lagos that 75 million Naira has been allocated for the control of malaria in the country under the Fourth National Development Plan.

Mr. Ugwu, who was speaking while launching a book titled "Sickle Cell Disease", written by Professor F. A. Lasi, of the University of Lagos, said 30 million Naira would be spent in expanding the country's immunisation programme.

He said since there was no cure for sickle cell disease, the best thing to do was to prevent it because "it is preventable".

He explained that to do this special emphasis should be placed on anti-malaria prophylaxis, regular immunisation and vaccination in the prevention of crises, reduction of complications, morbidity and prolongation of life.

The minister noted that better living conditions reduces the

likelihood of traumatic wounds, provide better nutritional status and supply less exposure to infections.

He said one quarter of the children born to families where both parents had the sickle cell trait would have the disease.

"Since the inheritance pattern is so simple and the detection of carrier not difficult, genetic counselling ought to be practised on a large scale, so that counselling can take place before early puberty," he added.

He gave the assurance that the Federal Government was prepared to assist professional bodies and research scientists in their efforts to find preventive cure for the disease.

Responding, Professor Lasi said since the disease thrived in poor environment, government should encourage research into the country's socio-cultural set-up in order to improve on the environment. (NAN)

CSO: 5400/5227

## NIGERIA

### BRIEFS

**CHICKEN POX**--The life of inhabitants of Abakpa Nike particularly Ugbene area, is now in danger. This is as a result of chicken pox epidemic spread in the area. An investigation carried out showed that over 30 percent of the kids in the area has been subjected to this dilemma. An appeal has been made to the Health Management Board, to launch an immediate operation in the area to check further spread of the epidemic. Illiterate parents in the area treats this disease with ignorance. [Egbuonye] [Text] [Enugu DAILY STAR in English 16 Jul 81 p 3]

**KANO STATE CHOLERA OUTBREAK**--An outbreak of cholera has been reported in Gumel local government area of Kano State. Our correspondent who visited the area last weekend reported that more than 20 persons were admitted in the Gumel General Hospital, out of which 5 have died. He said an average of two or three persons die of the disease daily. Efforts by our correspondent to meet the medical officer in charge of the hospital for further clarification were fruitless. However, reports from the area indicated that a campaign on cholera prevention has been launched by the health department of the Gumel local government. [Text] [AB032030 Kaduna Domestic Service in English 1700 GMT 3 Aug 81]

CSO: 5400/5241

BRIEFS

MEASLES FATALITY--Eight boys were reported to have died of measles in Mehrabpur and its vicinity during the last fortnight. The people of Mehrabpur have appealed to the Health Officer Nawabshah to send a medical team to combat the spread of the disease. [Text] [Karachi MORNING NEWS in English 7 Jul 81 p 3]

GASTROENTERITIS CASES REPORTED--Thirty eight cases of gastro-enteritis were reported to three major hospitals of Karachi yesterday. The Abbasi Shaheed Hospital received 10 cases. Of these, five were admitted while the remaining were discharged after necessary medical treatment. Thirteen cases were reported to the JPGMC. Of these three were admitted. The patients belonged to the age-group of 6 months to 11 years. Fifteen cases were reported to the Civil Hospital. Of these five were admitted while the rest were discharged. [Text] [Karachi DAWN in English 15 Jul 81 p 10]

CSO: 5400/4615



SINGAPORE

BRIEFS

CHOLERA CASES--Singapore, July 9 (AP)--Three persons suffering from cholera have been reported and investigations are continuing to trace the source of infection, Ministry of Environment said Thursday. [Text] [Taipei CHINA POST in English 10 Jul 81 p 1]

CSO: 5400/4949

## MINISTER REPORTS RESULTS OF DISEASE PREVENTION MEASURES

Dar es Salaam DAILY NEWS in English 15 Jul 81 p 3

[Excerpt]

THE Minister for Health, Ndugu Aaron Chiduo, reiterated in Parliament yesterday that eltor-cholera could be summarily wiped out in the country-if hygienic conditions, including drinking pure boiled water and the use of latrines were observed.

He told the House that the killer disease which had so far rounded all mainland regions, had claimed 2,153 lives out of 24,782 infections between October 1977 and last May.

Presenting his ministry's 1981/82 estimates, Ndugu Chiduo appealed to the people to keep their surroundings clean, boil water before drinking and use clean latrines.

He told the House that more tuberculosis and leprocy cases were treated last year under the national programme launched four years ago to fight the diseases.

He said 10,191 new TB cases were attended last year compared to 8,022 the previous year, while 4,471 leprocy victims were treated compared to 6,028 in 1979.

He explained that his

ministry would intensify the search for patients absconding treatment before they recovered. Doctors would be trained on more attractive curative methods, he added.

On malaria, he said, the spraying of mosquito larvae would be improved while people would be encouraged to use mosquito nets and anti-malaria doses. He said the World Health Organisation (WHO) was researching on anti-malaria vaccines.

His ministry, he said would continue with research on local spray compounds. An experiment carried out in Lindi Region reduced malaria cases by 25 per cent during the first year of the project, he explained.

The Minister said the campaign against bilharzia would be waged through mini-projects to be based on infected areas. At national level, he added, research was being carried out at a centre in Mwanza.

He said anti-bilharzia projects launched in Mbeya, Rukwa and Kilimanjaro villages, involving mainly spraying of carrier snails, had

reduced the number of known cases considerably.

The number of cases at Mkutwe village, Mbeya Region, he said, decreased from 59 to 24.7 per cent of the population. Preparations for a similar project at Kanyese village in Rukwa Region had been finalised, he explained.

He said measures had been taken to combat the disease at Kileo village in Kilimanjaro Region, where 47 per cent of the area's 3,000 residents was believed to suffer from bilharzia.

Ndugu Chiduo told the House that more mothers were now conscious of the importance of clinic services. A total of 3,737,122 expectant mothers were availed these services, an increase of 16 per cent over the previous year's attendance.

He explained that the number of children taken to clinics for vaccination increased by 23.6 per cent to 8,799,397 last year.

This, he added, had helped to reduce tuberculosis, whooping-cough, polio and measles cases among children. The number of victims had declined from 84,856 in 1978 to 62,875 last year.

## SCHISTOSOMIASIS SAID TO BE IN REFUGEE CAMPS

## Measures Suggested

Bangkok THE NATION REVIEW in English 5 Jul 81 p 11

[Article by Mechai Viravaidya]

[Text]

**SCHISTOSOMIASIS** is a chronic, debilitating infectious disease which chiefly affects the tissues of the intestinal tract, liver, and spleen. Its severity depends upon the worm burden, frequency of reinfection, and immunological response of the host to the parasite, resulting in significant morbidity and mortality. Although areas endemic for this disease exist in Laos, its presence has never been reported among Thai people. Because of the existence of the intermediate snail host for the spread of schistosomiasis within the borders of Thailand, its introduction into this country could pose a potential public health problem.

Political instability in the Indochina region has resulted in the influx of hundreds of thousands of

Lao and Kampuchean refugees into Thailand since 1975. Fecal examination conducted on Lao refugees in the Ubol Rajathani camp in northeastern Thailand uncovered one case infected with *Schistosoma mekongi*. During routine stool examinations of Kampuchean refugees in the Khao-I-Dang holding center in 1980 by the Community Based Emergency Relief Services (CBERS), two additional cases of *Schistosoma mekongi* were discovered. These unexpected findings led investigators from CBERS and the Faculty of Public Health, Mahidol University, to conduct further investigation into this problem. This research study was conducted in the Sa Kaew holding center for Kampuchean refugees to determine the prevalence of schistosomiasis among the camp's

30,000 inhabitants. Skin sensitivity tests were administered to a stratified random sample of 5085 persons. A total of 471 persons (9.26%) recorded positive reactions to the skin test. A positive diagnosis of *Schistosoma mekongi* was confirmed in 17 persons resulting in a prevalence rate of 3.34 cases per 100 population in the Sa Kaew holding center. The number of schistosome infections was greater for males than females (M:F = 11.6) with the greatest number of infected persons falling into the age interval of 31-40 years of age. Fourteen of the 17 confirmed cases of *Schistosoma mekongi* listed Battambang province as their locale of origin in Kampuchea.

If the prevalence rate of *Schistosoma mekongi* found in the Sa Kaew camp is si-

milar in other camps in which Kampuchean refugees reside, there is a potential human host reservoir of 350 cases of schistosomiasis throughout northeastern and eastern Thailand. Considering the infectious potential of this disease, and the presence of the intermediate snail host, immediate action should be taken to insure that schistosomiasis does not spread in Thailand or other countries in the region. We seek comments, suggestions, recommendations and support for further immediate action regarding this problem.

## Recommendations

In light of the findings of this study, the Community Based Emergency Relief Services recommends the following actions:

1. Similar studies be conducted in all

camps and holding centers in which Kampuchean refugees reside to determine the prevalence of schistosomiasis in the camp populations.

2. Surveys should be conducted in all waterways and water reservoirs in the vicinity surrounding each of the camps to identify the existence of natural and potential intermediate snail hosts.

3. Strict security be maintained around all Kampuchean holding centers to prevent inward and outward migration of the refugees pending the results of these surveys and studies.

4. All Kampuchean refugees leaving Thailand receive stool examinations using the formalin-ether sedimentation or AMS III techniques under supervision of skilled laboratory personnel to make a definitive diagnosis of schistosomiasis and that the results of this examination be incorporated into the permanent health records which accompany the refugees to third countries.

5. Processing centers in Asian countries be notified immediately of the results of this study so that appropriate action can be taken.

6. A schistosomiasis control programme be immediately instituted in the Sa Kaew holding center consisting of the following activities:

a) identification of all positive cases with schistosomiasis

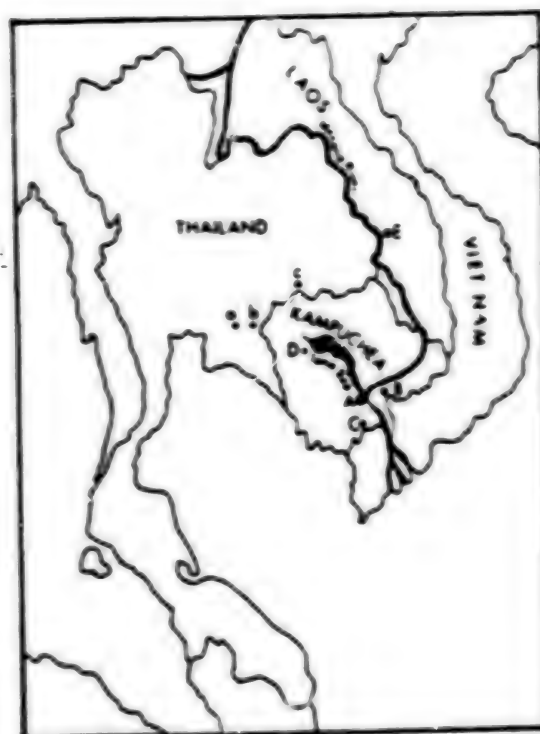
b) treatment of all positive cases with available anti-schistosomiasis drugs

c) health education programmes be encouraged to increase awareness of this problem

d) environmental sanitation concentrating on the use of latrines and sanitary disposal of human waste be improved

### The survey:

In the past schistosomiasis has been reported in the Indochina region, particularly in Khong Island which is situated in the Mekong river basin in Laos, but its presence has never been officially reported among Thai people. Political and economic instability in Indochina has resulted in the migration of hundreds of thousands of refugees to holding centers in Thailand. Some of these refugees may have originally come from areas where *Mekong Schistosoma* or *Schistosoma mekongi* is endemic. These refugees are confined in various camps in the northeastern and in the eastern parts of the country. In the areas where these refugees are confined, the presence of the freshwater hydrobiid snail, *Fricula aperta* (*Lithoglyphus aperta* Temchen-Temchen, 1971; Brand, 1974) has been reported. These snails have experimentally proven to be the intermediate host of *S. mekongi*. If the infected refugees escape the confinement of the camps and promiscuously defecate in or around the canals, rivers or water reservoirs in this area, the possibility of Thai people becoming



A = PHNOM PENH  
B = SVAY RIENG  
C = TAKEO  
D = BATTAMBANG  
E = KHONG ISLAND

a = Sa Kaew  
b = Khao-I-Dang  
c = Kab Cherng

Figure 1: Map of Thailand and Indochina depicting the geographic location of the study sites, endemic area for *S. mekongi*, and original localities of *S. mekongi* positive cases.

infected with schistosomiasis is inevitable.

A potential reservoir of *S. mekongi* within the borders of Thailand could pose a serious public health problem. In order to improve agricultural productivity, the Royal Thai Government is embarking upon a program to extend the construction of dams and man-made irrigation systems, especially in the northeast region of the country. If these waterways became contaminated with feces containing the ova of *S. mekongi*,

it could result in wide geographic transmission of the disease and a deteriorating health and economic situation in the country. Such a scenario has previously been encountered in other countries as an unforeseen consequence of "development". The classic example occurred in Egypt with the construction of the Aswan Dam. As a result of this massive irrigation project schistosomiasis was unintentionally transmitted to an enor-

mous geographic area, so that at present it is estimated that at least fifteen million people suffer from this illness (Van der Schalie, 1974).

### CONTROL

According to a parasite survey among Laotian refugees at Ubol Rajathani refugee camp conducted by staff of the Parasitology Department, Faculty of Public Health, Mahidol University, a case of Schistosomiasis was reported (Temcharoen et al., 1979). In addition, the Community Based Emergency Relief Services (CBERS) (Keittivuti et al., to be published) found some cases of schistosomiasis amongst Kampuchean refugees at Khao-I-Dang refugee holding center, Aranyaprathet, Pra-

chiburi Province while implementing a comprehensive soil-transmitted helminthiasis control programme in that camp. This evidence led CBERS to initiate further epidemiological studies on schistosomiasis amongst Kampuchean refugees at Karb-Choeng refugee camp, Surin Province (Fig. 1) using the intradermal skin sensitivity test as a screening method to detect schistosomiasis. The survey revealed 12.94% (164/1329) skin test positive to schistosomiasis. The unexpected survey result, plus the previously mentioned existence of schistosomiasis among the refugees, and the availability of an intermediate host in this region led CBERS to undertake further in-

vestigations to determine the prevalence of schistosomiasis among Kampuchean refugees residing in Sa Kaew Refugee camp in order to obtain a better understanding of the magnitude of this problem.

### BACKGROUND

A person was considered negative if 3 successive stool specimens were negative for schistosome ova. On the other hand a person was considered positive if one or more of the successive stool specimens was positive. The case history background of the positive cases concerning age, sex and original locality in Kampuchea was recorded in order to determine whether these variables had any relevance among the infected person.

## Epidemic Fears Allayed

Bangkok BANGKOK POST in English 3 Jul 81 p 2

[Text]

SCHISTOSOMIASIS is not likely to reach a dangerous level in this country, a UNHCR official said yesterday.

The claims of the Community-Based Emergency Relief Services (CBERS) and the Population and Community Development Association (PDA) that the disease could cause a national disaster in Thailand is alarmist in nature, the official told the Post yesterday.

"The disease has not reached epidemic level, and is not likely to be widespread in this or any other country," Mr Allan

Coat, the UNHCR information officer said.

He said the UNHCR learned of the presence of the disease at Sa Kaew two months ago and everything was done to treat, track and isolate the disease.

"Every refugee is given a careful medical examination before they leave for third countries," he said. However, UNHCR Health Coordinator Dr A.G. Rangaraj had previously told the Post that 14 Laotian refugees in the US were found to have the disease.

### 'NOT FAIR'

"It is also not fair to say that the disease came from the refugees. Just because the initial research began at the camp you cannot assume that the refugees are the source of the disease in this country," Mr Coat protested.

He claimed that the danger is minimal at this point, and that there is no evidence at present to suggest otherwise. Unlike some other diseases, this one carries no risk of direct infection because it needs the snail host as a spreading agent.

Asked to comment on criticism by CBERS and PDA that not enough research has been done to determine the scope of the problem, Mr Coat said he was not a doctor and did not have the technical knowledge to answer the question. He added it should be referred to Dr Rangaraj. However, Dr Rangaraj could not be contacted yesterday.

A comprehensive schistosomiasis case identification and treatment programme is being set up in the Ban Kaen holding centre, Sa Kaew, and in the immediate surrounding areas of the camp, in a joint operation by CBERS, PDA and UNHCR.

ZAIRE

BRIEFS

DRUGS FOR INFLUENZA EPIDEMIC--Lobeke in Kasai region is relieved. A presidential intervention has just reassured the people of the West-Central District where influenza was sowing desolation. The presidential intervention consists of the dispatch of drugs to combat the influenza epidemic devastating the Lobeke area. We must add that the drugs were presented to the people during a popular gathering presided over by the regional governor, Citizen (Efanbe Yolanga), who is now on an inspection tour of the Sango subregion. We wish to report that this epidemic has already made many victims in that part of the republic. [Excerpt]  
[AB291437 Kinshasa Domestic Service in French 1200 GMT 29 Jul 81]

CSO: 5400/5235



WAR ON TSETSE CRUCIAL TO INCREASED PRODUCTION

Lagos BUSINESS TIMES in English 13 Jul 81 p 5

[Text] From the Sahara to the Zambesi the tsetse fly is the scourge of the savannah and an ever-present threat to cattle on which millions of Africans depend for a living.

An FAO report calls for war on tsetse fly to increase the number of cattle in the area by 120 million, resulting in a 1.5m-ton annual increase in meat output.

The Bonn government backs a number of projects in African countries designed to help achieve this projective. Care is taken whenever possible to ensure that ecological considerations are borne in mind in fighting the carrier of the dreaded sleeping sickness.

Insecticides used in the Adamoua highlands of Cameroun, for instance, are carefully chosen to ensure that pasture cleared of tsetse flies is immediately safe for cattle grazing.

Biological warfare on the tsetse fly in Upper Volta, with Franco-German support, is also reported to be progressing well.

The biological approach, devised by a specialist from the Federal Republic of Germany, consists of mass-breeding at very little expense, sterile males that mate with unsuspecting females, resulting in zero offspring.

Another project deals with the resistance to sleeping sickness developed by certain breeds of cattle. The aim is to develop a vaccine immunising herds against the disease.

Other measures include staff training schemes, development of veterinary medicine and research facilities and the establishment of countrywide inspection and control services.

For ecological and climatological reasons increases in agricultural output in regions contaminated by the tsetse plague are virtually impossible

This makes it all the more important to boost meat output, and German specialists rate the prospects distinctly promising.

Above all, the virtual elimination of tsetse fly will, it is felt, prove a crucial feature of efforts to ensure that Africa continues to produce enough food to feed itself.



## VETERINARIANS CRITICIZE HANDLING OF FOOD-AND-MOUTH DISEASE

## Health Standards, Safety Precautions Questioned

Kuala Lumpur NEW STRAITS TIMES in English 1 Jun 81 p 8

[Text] THE OUTBREAK of foot and mouth disease (FMD) at the Shah Alam abattoir and the manner in which it was handled by the authorities last week has raised several questions about health standards and safety precautions at the abattoir.

Vets, especially, were puzzled by the delay in the detection of FMD among the 680 or so cattle — which included 610 Australian cattle — awaiting slaughter at the abattoir.

The abattoir reported that cattle were dying by Wednesday, May 21, after the disease had been discovered in the animals two days earlier.

Said one vet: "It is surprising that nobody there recognised the symptoms of FMD earlier. The animals would have displayed signs of lethargy and going off feed before the fever and vesicles appeared (see accompanying story)."

"It usually takes days before an animal dies of starvation or secondary infection — easily between a week and 10 days — and somebody should have been alert to the signs. Of course, the FMD could have been recognised earlier and not have been disclosed to the public," said the vet.

Vets said the most effective step against the spread of FMD to areas outside the abattoir would have been the destruction of the cattle there.

The vets were surprised, however, to read newspaper reports that infected animals were dying in

the abattoir compound right next to cattle that had not yet been infected.

One photograph showed the remains of a dead cow in the compound of the abattoir, indicating that the burial of dead cattle was not being carried out fast enough.

According to Majuternak, burial of dead animals was going on constantly but abattoir sources said nobody worked at burying the dead animals last Sunday.

Majuternak also claimed that no animals died in the yard of the abattoir. Once again newspaper photographs showed otherwise.

Vets were also concerned that crows and flies were hovering around the carcasses of yet unburied animals, as these could easily spread the highly-infectious disease to animals in nearby areas.

Majuternak Director-General Dato Dr Mohamed Noordin bin Haji Keling admitted in a statement to one newspaper that crows and flies could well

have feasted on the carcasses before the burial pits were filled. There was no mention of anything being done to keep the flies and crows away.

Another vet called this "a shocking state of affairs" and predicted that it was only a matter of time before cattle in the Shah Alam and other nearby areas suffer an outbreak of FMD.

According to abattoir sources, a total of 135 cattle not affected by FMD were slaughtered the following Friday and Saturday and kept in deep freeze. Does this, asked the vets, indicate that Majuternak was attempting to salvage beef from the stock that should have been destroyed?

If at all Majuternak intended to sell this beef, the vets added, they must be absolutely sure that the beef is not contaminated with the FMD virus that could have been incubating in the cattle.

The vets are against any sale of meat from FMD affected animals. "When an animal has a fever, its meat becomes unwholesome," said a vet.

"The 'fevered flesh' from these animals usually cannot be fully drained of blood after slaughter, causing it to be discoloured and highly susceptible to bacteria that multiply in blood.

"Although it has been said that such meat is edible if it is properly boiled, consumption of such meat should not be encouraged," he added.

Vets were also alarmed by the fact that pigs were being slaughtered at the abattoir in an area just next to the cattle abattoir, separated only by a wire fence.

"Although the abattoir authorities have said that the pigs are slaughtered the day after they are brought in, who is to say that every pig is killed as planned."

"If a pig stays just one day extra, there is every chance it might pick up FMD just before being slaughtered," a concerned vet told the *New Straits Times*.

A Veterinary Department source said the FMD outbreak at the abattoir was "nothing serious." His statement clearly contradicted the remarks of Agriculture Minister Datuk Abdul Manan Othman last week that the problem was "bad".

The source said that measures had been taken to prevent the spread of FMD. Our reporters were unable to locate any farmer or breeder in the area around the abattoir whose cattle had been vaccinated recently.

Kuala Lumpur NEW STRAITS TIMES in English 1 Jun 81 p 8

[Text]

THE foot and mouth disease occurred in epidemic proportions in various parts of the country before 1939. The largest single outbreak occurred in Perak in 1938 when over 1,000 animals were affected.

The disease was eradicated in 1939 and the country was free of FMD until 1973 when an outbreak occurred in Perlis.

In 1978, the disease appeared in epidemic proportions and since then FMD has been endemic in the country, according to veterinarians.

In a paper to the Malaysian Veterinary Association conference in late 1979, consultant veterinarian Dr Chong Sue Kheng said that prior to 1973, "FMD was regarded as an exotic disease and received little attention,

notwithstanding Malaysia's common border with Thailand, where the disease was endemic."

The 1973 outbreak in Perlis exposed Malaysia's vulnerability to FMD. The authorities eradicated the disease in three weeks but this was because the outbreak was of a mild and limited nature. Dr Chong said a total of 397 animals were destroyed during

the outbreak.

He said the long period of freedom from FMD between 1939 and 1973 was due to one factor—that there was no FMD in southern Thailand in spite of the fact that it was endemic in northern Thailand.

Dr Chong said the FMD from northern Thailand could have spread in recent years to southern Thailand. "There was little doubt that the outbreak in Perlis in 1973 and in Kelantan in 1978 was caused by infection from Thailand" as the types of virus involved were found in Thailand.

The increased cattle trade between Thailand and Malaysia, smuggling of beef and the common border that allows the frequent movement of cattle across the border has contributed to the spread of FMD.

"Many Thais and Malaysians have relatives across the border. They visit one another and move their animals to and fro across the border. Also, not all imported cattle from Thailand have been quarantined at Padang Besar or Butterworth. They have been smuggled in considerable numbers at several points at the border and it is almost impossible to prevent this," Dr Chong said.

### Cripple

He said southern Thailand was not free of FMD after 1973 and the authorities in Malaysia failed to realise that the disease was endemic there. No action was taken to formulate a national policy to meet the threat of future outbreaks.

"Vaccination should have been implemented along the border after the 1973 outbreak in spite of its FMD freedom. The control of FMD would have been simplified had the animals been protected before they were exposed to infection."

The 1978-1979 outbreak almost crippled the meat and livestock trade. All inter-State movement of animals was banned. A massive vaccination campaign was launched in which more than 130,000 animals were vaccinated.

The Veterinary Services Department launched a "search and destroy" campaign to wipe out infected animals. Road blocks were set up to prevent animal owners from moving infected animals. A total of 18,117 animals were destroyed and the Government paid \$4,578,846 in compensation to farmers.

### Solution

In August last year, there was another outbreak in Perlis, Kedah, Butterworth and Perak. According to Agriculture Ministry sources, the outbreak was due to the lack of co-operation from farmers who did not get their animals vaccinated.

"These farmers brought their animals for attention only after they contracted FMD, when we had advised them to get their cattle vaccinated twice in the first four months."

Veterinarian Dr A Mahendra said the destruction policy would only encourage owners to move sick cattle to new areas and thus spread the FMD infection. It would also be wasteful to destroy animals only suspected of coming in contact with infected cattle, as had been done.

## MALAWI

### BRIEFS

SUCCESSFUL RABIES CAMPAIGN--Nkhata Bay, Sunday--The rabies control campaign mounted by the Department of Animal Health and Industry here last month has ended. About 120 stray dogs were destroyed and 1,442 were vaccinated against the disease according to the Veterinary Office here. The campaign which was carried out to control the spread of rabies in the district covered the areas of Kalambwe, Limphasa, Vizara, Malanga, Chintheche, Chombe, Sanga, Chituka, Kande, Chisiwa and Tukombo.--MANA [Text] [Blantyre DAILY TIMES in English 13 Jul 81 p 10]

CSO: 5400/5242

## BRIEFS

FOOT-AND-MOUTH DISEASE UNDER CONTROL--The foot-and-mouth disease outbreak registered at the beginning of this month in the district of Magude is under control, according to the statement by an official of the cattle-breeding sector of the provincial agricultural directorate. The Magude outbreak reached Moamba in the neighboring district through the locality of Macaene, penetrating 15 kms within Moamba. This official added that the disease has not spread and that the original affected area remains the same; the spread to Moamba could have been avoided if preventive measures could have been adopted. These could not be carried out because of a lack of transportation and other means. Vaccination of cattle and establishment of cordons sanitaires in the two districts is continuing, with more than 40,000 heads of cattle having already been vaccinated, 80 percent of which belong to the family sector. Despite the fact that there have been no deaths, the outbreak of the disease could affect the number of animals destined for slaughter in the main urban centers. [Excerpt] [Maputo NOTICIAS in Portuguese 23 Jul 81 p 3]

CSO: 5400/5238

## NIGERIA

### BRIEFS

RABIES IN ENUGU--Veterinary department of the Anambra State Ministry of Health has launched a battle against the reported spread of deadly rabbies disease in Enugu. The department has therefore advised dog owners in the state capital and its environs to present their dogs for inoculation at the various offices of the Ministry. A Principal Veterinary Officer for Enugu Zone, Dr Uchenna Eze who spoke to the DAILY STAR revealed that diagnosis conducted on some dogs in Uwani confirmed the presence of the deadly disease in them. Dr Eze urged for constant inoculation of dogs by dog-owners at least once a year in order to avoid the rabbies disease. [Text] [Enugu DAILY STAR in English 21 Jul 81 p 16]

CSO: 5400/5245

## ANIMAL-FISH FARMING POSES HEALTH HAZARDS

Manila PHILIPPINES DAILY EXPRESS in English 17 Jul 81 p 5

[Article by Rodolfo A. Fernandez]

[Text]

**C**OLLEGE, Laguna — Animal-fish farming can help narrow the food supply-demand gap in much of the country, says a noted scientist, but this technology also poses health hazards that must not be ignored.

"There are diseases communicable or potentially communicable to man via fish or water, using animal wastes in integrated animal-fish farming," warns Carmen C. Velasquez of the National Academy of Science and Technology.

For quite some time, traditional farming has recycled animal wastes without noticeable harm to the environment, notes Ms. Velasquez. Progressive crop growers have used animal manure to maintain soil fertility.

In thinly populated areas, low concentrations of animal wastes apparently cause no health hazards, and are taken up in natural nutrient cycles.

"Today, however, we run high risks of contamination of the environment from human activities coupled with high population density," points out Ms. Velasquez.

In a paper on "Health Constraints to Integrated Animal-Fish Farming in the Philippines," she notes that in many tropical and subtropical

countries, parasitic infections of animals and men exact a serious toll on life and health.

Aquatic pollution (organic or inorganic) is also a matter of concern, not only to parasitologists and health authorities but also to government and private citizens. Fish kills result in socio-economic problems, and contamination of food fish commonly causes gastro-enteritis and other human ailments.

The NAST scientist explains that environmental factors external to the host play a major role in the survival of parasites. Sunlight, temperature, pH and salinity are among the important physico-chemical factors.

"Little information is available in the Philippines on the use of animal wastes in relation to the diseases of aquatic animals, but we know that aquatic pollutants produce physico-chemical changes, which may cause stress and result in diseases," stresses Ms. Velasquez.

For example, wastes high in nutrients can produce oxygen depletion and consequent stress. Domestic wastes can also introduce pathogens of aquatic organisms and man.

Ms. Velasquez says animal-fish farming can bring about bacterial,

protozoal, helminthic and nematode infections.

Pathogenic bacteria carried by fish include *Escherichia coli*, *Shigella* spp., *Streptococci*, *Clostridium* *betulinum* type E. Gunnison et al, *C. tetani* Flugge-Holland and *Staphylococcus aureus* Rosenback. *E. coli* Castiliani and Chalmers have been carried by salmonid fish without harming the fish.

Tuberculosis has also been observed in a wide range of animals, including fish, frogs, alligators, snakes and turtles.

"Transmission of bacterial pathogens depends on environmental conditions coupled with release from the host at varying intervals and may be enhanced if they breed freely in water," Ms. Velasquez explains.

She cites erysipelas as an example of a communicable disease of swine and poultry. It is caused by corynebacteria, *Erysipelothrix insidiosa* Langford and Hensen, *E. murcepticum* Rosenback, *E. rhusiopathiae*, *Bacillus erysipelatus* suis and *B. rhusiopathiae*.

Infected fish are not themselves affected and show no symptoms, according to Ms. Velasquez. Man contracts the infection through skin abrasions resulting from handling materials of animal, fish or shellfish origin. It is often called "fish-handlers disease" in the United States and produces a condition called "Fish Rose."

Severe inflammation may result when wounds are infected through the mucus of dead fish. A burning and itching skin sensation may last up to three weeks.

Leptospirosis (Weil's disease, Canicola fever, haemorrhagic jaundice, swine's head disease) is another disease that poses a hazard to agricultural, fish and abattoir workers, sewer workers and other regularly exposed to water contaminated by the urine of wild or domestic animals.

Bathers and campers can get this disease in infected areas. Floods enhance its distribution.

The chief causative agent of leptospirosis in cattle, swine and carabao in the Philippines is *L. pomona*. There are cases where people swimming in waters contaminated by *L. pomona*-infected animal excreta have contracted leptospirosis.

"The possibility of fish being implicated in the dissemination of the disease is not remote if they are reared in contaminated water," says Ms. Velasquez.

Amoebiasis (amoebic dysentery) and Balantidiasis (Balantidial dysentery) are two diseases that cause protozoal infections. These diseases occur in areas with poor environmental sanitation. Association with hogs and use of animal manure as fertilizer may result in higher incidence of the disease. Water-borne epidemics are not infrequent.

The fish species that harbor human helminthic infections include martiniko, kanduli, hito, bia, dalag, bitngo, ayungin, langaray, babansi, kitan, bangus, malakapas, kansusuit and talilong.

Infection of fish-eating mammals, birds and man occurs mostly upon ingestion of infected fish flesh, either raw or not well cooked, warns Ms. Velasquez. Cardiac and visceral complications in humans are known in the Philippines.

An example of a protozoa-caused disease is schistosomiasis. In the Philippines, the major reservoir hosts of *Schistosoma japonicum* are pigs, cattle, carabaos, horses, other domestic animals such as cats, dogs and even field mice and wild rats.

Infection is acquired through skin penetration by the cercariae released from the snail host, *Oncomelania quadrasi*. The disease is limited to areas inhabited by the snail.

"Contamination of water with feces of reservoir animals continues to be a public health hazard," observes Ms. Velasquez. "It is not, therefore, advisable to use animal wastes for integrated animal-fish farming in such areas." — DEPTHEAN



# CATTLE DEATH REDUCTION PROGRAMS

Dar es Salaam DAILY NEWS in English 18 Jul 81 p 3

[Text]

TICK-BORNE diseases claimed the lives of 20,480 cattle in 15 regions last year, according to the minister for livestock development, Ndugu Herman Kirigini.

He was answering a question from E. Ng'hwani (Bariadi) who wanted to know what could be done to reduce cattle deaths.

Ndugu Kirigini said east coast fever alone killed 23,949 cattle, while other deaths were caused by tsetse fly (2,449), anthrax (3,632) and backquarter (2,270).

The Minister said the deaths could be drastically reduced by introduction of more dip services.

Ndugu Kirigini also cited a shortage of competent personnel, confinement of cattle in tsetse fly infested areas as well as insufficient drive by

leaders to encourage modern animal husbandry as some of the drawbacks to the livestock industry.

Answering a question from Ndugu E. Byetima (Karugwe), Ndugu Kirigini said the Government was studying a programme drawn by the UN Food and Agriculture Organisation (FAO) on combating the tsetse fly menace in the district.

The programme would be executed by the Kagera Basin Development Organisation, he added.

The Minister further said some 1,700 square kilometres in Mwisu, Kagera Region, had been cleared of tse-tse fly with assistance from the United States Agency for International Development (USAID).

CSO: 5400/5243

THAILAND

FOOT-AND-MOUTH DISEASE CONCERNS PORK EXPORTERS

Bangkok BANGKOK POST in English 7 Jul 81 p 21

[Text]

**A PLAN by the Thai-Singapore joint venture company, Sing Thai Farm Ltd, to export live pigs to Singapore has been affected as foot and mouth disease is spreading in the south of the country, Under-secretary of State for Agriculture and Cooperatives, Dr Thalerng Thamrongnavasawad said yesterday.**

The Singapore Government had agreed to import live pigs from the Sing Thai Farm Ltd in October this year.

The first shipment was to have been about 400 live pigs, with subsequent shipments twice a month.

According to Dr Thalerng, representatives of the Singapore and Thai governments met in Songkhla recently to discuss this matter.

The Singapore representative expressed concern over the outbreak of the disease in South Thailand, pointing out that it will block the trad-

ing of live pigs between the two countries.

He asked the Thai Government to take action to eradicate the disease as soon as possible if the export order placed for October is to be honoured.

He noted that then the Thai and Singapore governments agreed on this matter several years ago, there was no foot and mouth disease in the South. The disease first became a problem about two years ago.

But the Livestock Department has not been able to eliminate it as the smuggling of infected

animals from Burma is continuing, Dr Thalerng noted.

In an effort to solve this problem, the Livestock Department has sent a number of officials to vaccinate the animals in the South and to provide training programmes to farmers on ways to control this type of disease, he said.

Furthermore, officials from various government agencies, such as police and the military, have also been asked to cooperate in stopping the smuggling of animals from Burma, the under-secretary said.

## BRIEFS

CHOLERA FOUND IN SHRIMP--Cholera traces were found in a Tokyo port in a shipment of frozen shrimps from Thailand last week, the second such discovery in Japan for Thai imports there this year, according to a report from Tokyo quoted by the Daily Trade News published by the Commerce Ministry. The report said the cholera strains were found by officials from the Japanese Public Health and Welfare Ministry in one of the three containers in a Panama-registered vessel docked in the Japanese port on June 22. The whole of the nine-ton shipment of marine products from Thailand was ordered sent back to Thailand by the Japanese officials, the report said. The report added that cholera was first found in a shipment of Thai frozen shrimps in January this year at Kobe port. The report did not identify the export firm related to the shipment. [Text] [Bangkok THE NATION REVIEW in English 3 Jul 81 p 10]

CSO: 5400/4620

## BRIEFS

STRANGE CASSAVA DISEASE--A strange cassava disease has broken out in the Agave area of the Volta Region causing serious food shortage in the area. This was reported to the Deputy Minister of Labour and Social Welfare, Mr P. Y. Dzobo, by Togbe Hlitabo III, Awomefia of Agave Traditional Area during a meeting with the chiefs and people of the area of Dabala. Togbe Hlitabo therefore, appealed to the Minister of Agriculture to send a team of experts down to his area to identify the disease and make recommendations for its eradication. He also appealed to the Government to rush a special emergency consignment of food items to the people to save them from starvation. [Excerpt] [Accra GHANAIAN TIMES in English 13 Jul 81 p 5]

CSO: 5400/5239

INSTRUCTION TO FARMERS ISSUED ON AVOIDING DISEASE

Lagos DAILY TIMES in English 21 Jul 81 pp 20-21

[Article by Tom Udechil]

[Text]

**T**HE declining cassava production in Nigeria has been attributed to the inability of the farmers to plant and harvest according to specifications.

"If the farmers were to farm according to given guidelines, the mealybug disease would have been averted and the farmers would have been able to produce yearly the estimated ten million tonnes of cassava root tubers which could feed the citizens conveniently for a year".

This was contained in a bulletin just issued by the National Root Crops Research Institute at Umudike near Umuahia in Imo State.

The institute attributed the low cassava yields to the use of low-yielding cassava varieties, prevalence of pests and diseases, poor farming practices and the infertile soils on which cassava is traditionally grown in Nigeria.

Then enlightening the farmers on the techniques for growing cassava, the institute warned that cassava should never be grown in a water-logged area.

Concerning the varieties most suitable for growth, the institute emphasised that farmers should plant varieties 60506 or TMX 30211 depending on the ecological zone and provided the cassava sticks are not more than 10 to 12 months old.

The institute has further instructed that the best period for planting is during the early rains in March and April, depending on whether or not the cassava would be intercropped with other items.

In connection with harvesting, farmers have been urged not to allow cassava to stay too long before they are harvested.

The institute has further implored the farmers to realise that apart from the mealybug disease, there are more than 30 other diseases that could attack cassava, if kept beyond the harvest time.

Farmers have therefore been advised to ensure that cassava cuttings are treated with chemicals before planting.

BRIEFS

LOCUST THREAT--South Africa was on the brink of a serious locust outbreak, according to AGRICULTURAL NEWS published in Pretoria. The newsletter of the Department of Agriculture and Fisheries, quoted Mr Isak Venter of the Plant Protection Research Institute, as saying enormous damage to grain and grazing could be expected should the locusts leave the Karoo breeding areas. There had been a dramatic increase in locust populations in the central and eastern Karoo. He said State locust teams were well-prepared to "go into battle," but he appealed to farmers to immediately report outbreaks of Hopper locusts on their farms. [Text] [Johannesburg THE CITIZEN in English 21 Jul 81 p 10]

CSO: 5400/5227

## TANZANIA

### BRIEFS

IDENTIFICATION OF MAIZE PEST--Insects destroying maize in Tabora Region have been identified as *prostephars trincutus* and should be combated by a chemical called actellic two percent dust. This was said by the Minister for Agriculture, Ndugu Joseph Mungai, in the national assembly yesterday in reply to a question from M. Tambwe (National). He said the insects--nicknamed "scania" because their faces resembled the front part of scania trucks--emerged during the 1980 and 1981 cultivating seasons. The Minister said the Commonwealth Agricultural Bureaux--which identified the insects--was still researching on an effective drug, but proposed that actellic two percent dust be used in the meantime. Ndugu Mungai added that 50,000/- had been set aside for the purchase of the chemical. [Text] [Dar es Salaam DAILY NEWS in English 23 Jul 81 p 3]

CSO: 5400/5243



VIETNAM

RICE CROP DAMAGE IN SOUTH 'EXPECTED TO DROP'

BK281233 Hanoi International Service in English 1000 GMT 28 Jul 81

[Text] In southern Vietnam's provinces, some 20 to 25 percent of the rice acreage were damaged by crop pests over the past years. Crop protection, therefore, is the primary concern in agricultural production.

According to the Ministry of Agriculture, almost 1 million tons of rice were damaged by brown plant hopper spells from 1977 to 1979, the most serious one in the past 5 years being in the Mekong River delta provinces. The crop pests destroyed from 10,000 to 100,000 hectares of ricefield for each crop.

Apart from using chemical products, the crop protection work includes other ecological measures called the synthetic process against crop pests. The brown plant hopper eradicating process, for example, widely applied in the past year, consists of a number of measures such as replacing pest-damaged rice strains with the pest-resistant rice hybrids, cultivating or harvesting simultaneously in various areas to prevent the outbreak from one field to another and one crop to the next one, and destroying new hotbeds of brown plant hopper with insecticides. As a result, the rate of rice area damaged by brown plant hopper dropped from 28.5 percent in 1978 to from 3 to 5 percent in 1980.

Other manual measures have been applied to destroy other crop pests at their embryonic stage. In addition to technical efficiency, this synthetic process has brought great economic results, saving for the state thousands of tons of insecticides and fuel every year.

After the crop pest spells, peasants and agricultural cadres have drawn experience. In the past 2 years, two regulations on crop protection in agricultural production and on control of crop pests have been promulgated by the state. By late 1980, the provinces from Quang Nam-Danang southward had built 22 crops protection stations at the provincial level, 46 others at the district level, and tens of thousands of teams at production collectives and state farms, and trained hundreds of thousands of cadres for crop protection work.

The crop pest control service is informed every 5 days, every month, every crop and plant growth period. Due to effective measures, the rate of rice acreage damaged by crop pests is expected to drop from 10 to 15 percent by the end of this year.

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